

# Communication Superhighway

Hybrid Fiber/Coaxial Network  
and  
New NSFNET Architecture

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# U.S. Internet

## Three-Tier Structure

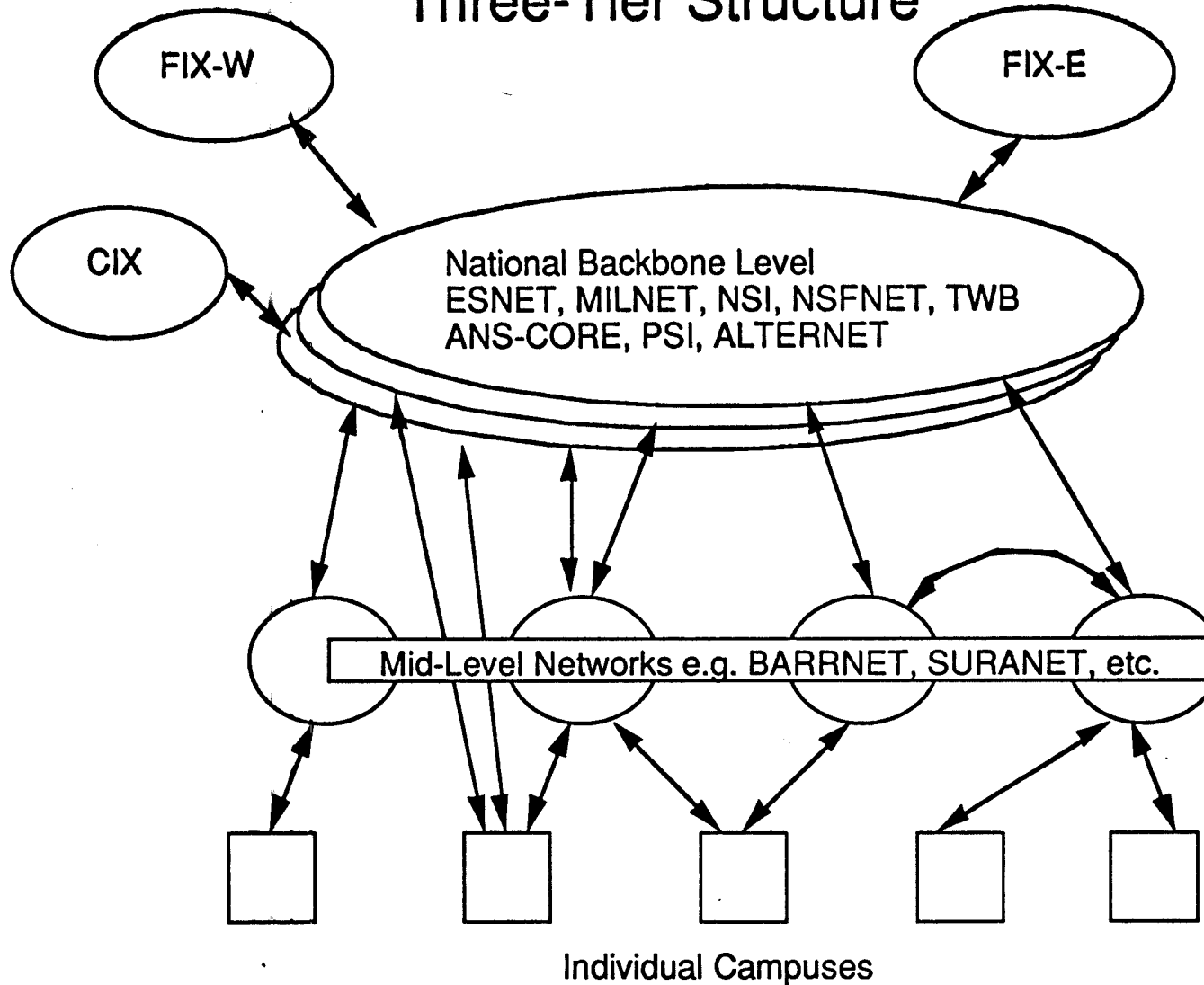


Figure 1

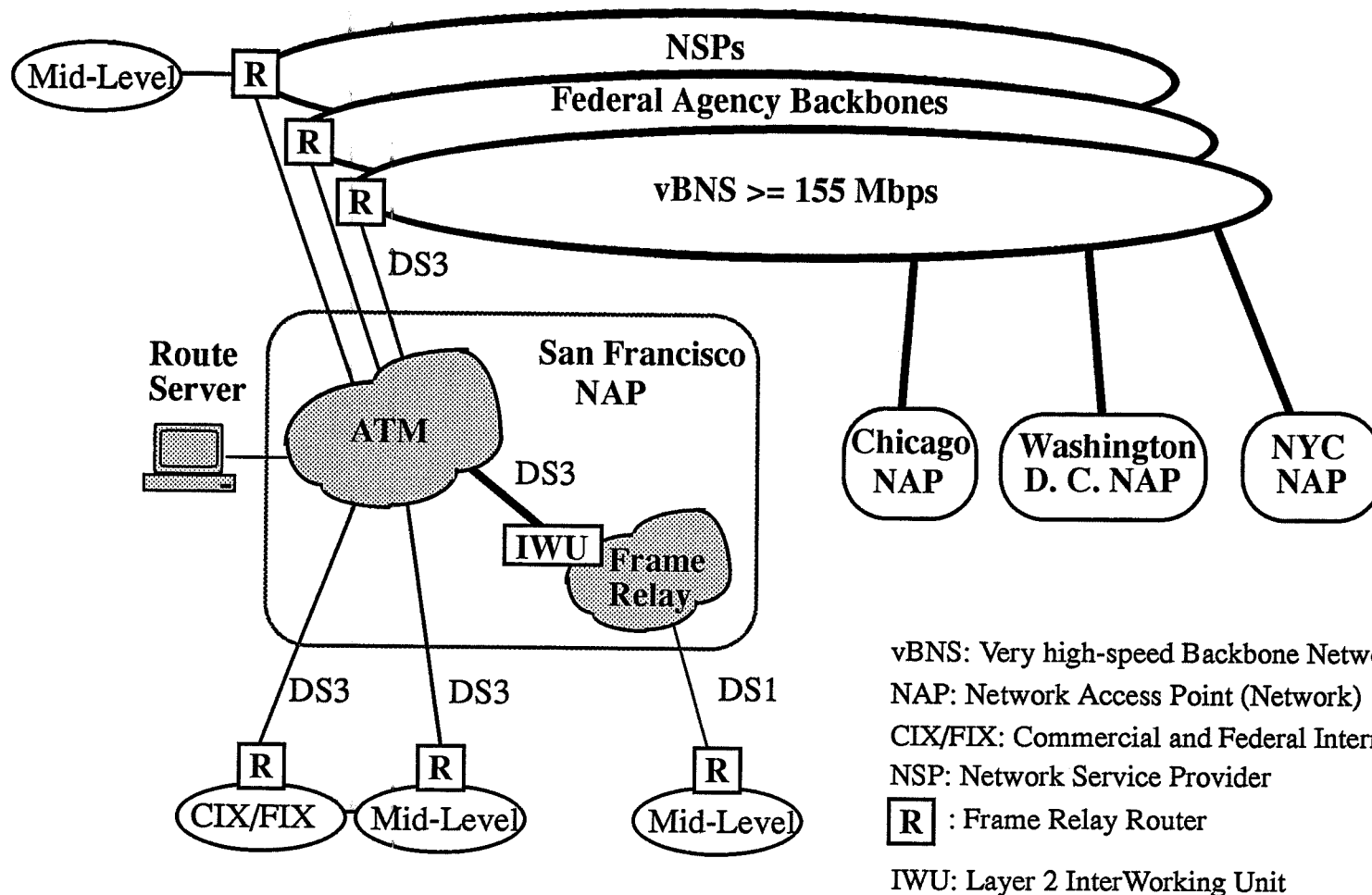


Figure 1. Phase 1 California NAP Topology

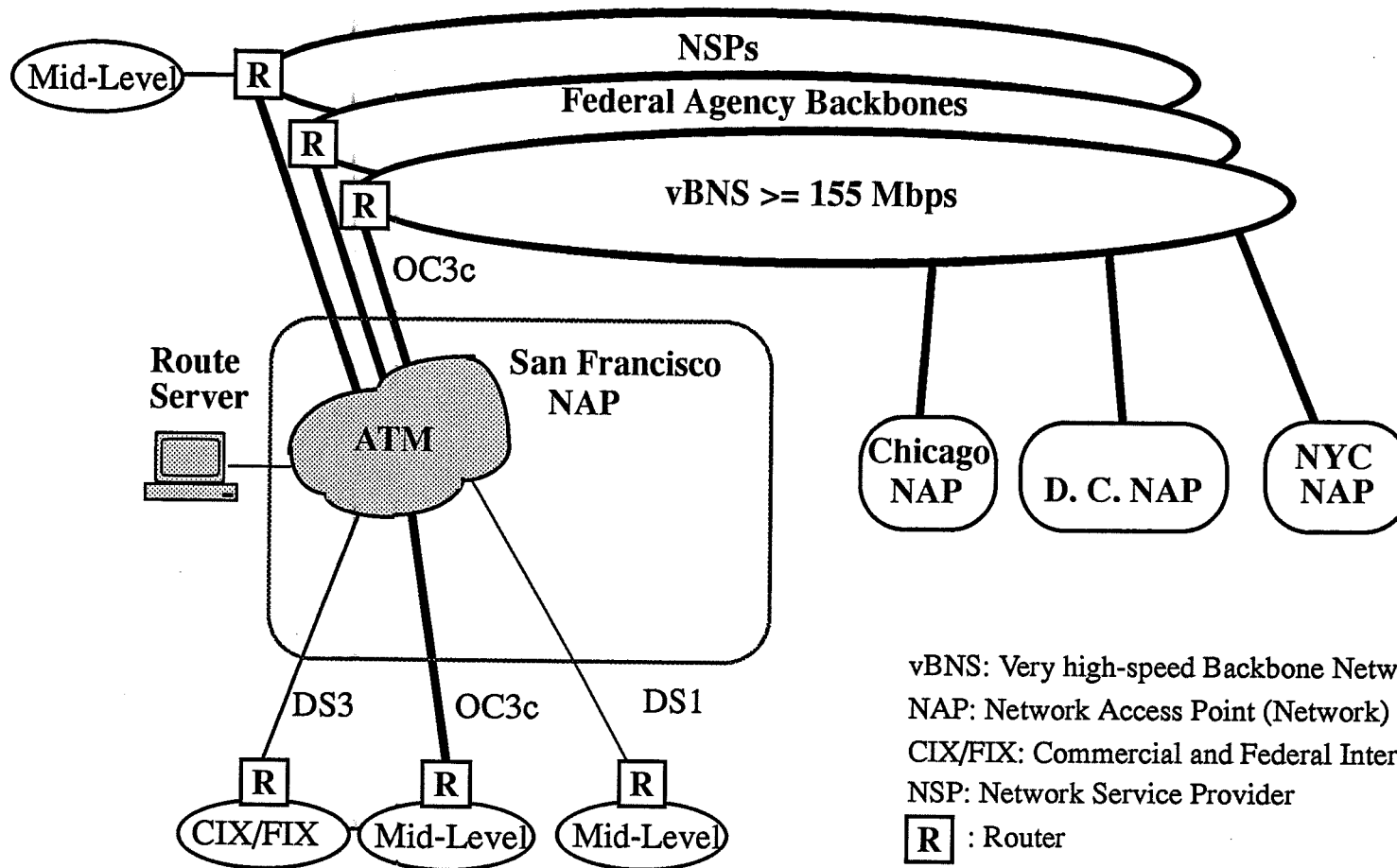


Figure 2. Phase 2 California NAP Topology

## **Pacific Bell NAP Features**

- ATM/SMDs Technologies - low network latency
- Access speeds range from 1.5 Mbps to 155 Mbps
- Multiple network protocol interoperability - e.g. Ethernet, FDDI, ATM
- Virtual POPs (Point Of Presence) within a LATA
- Attractive pricing - mileage insensitive flat monthly rate
- Multiple NSP/midlevel networks access and selection
- Public network - no access denial
- NAP and enterprise network sharing
- Video capability

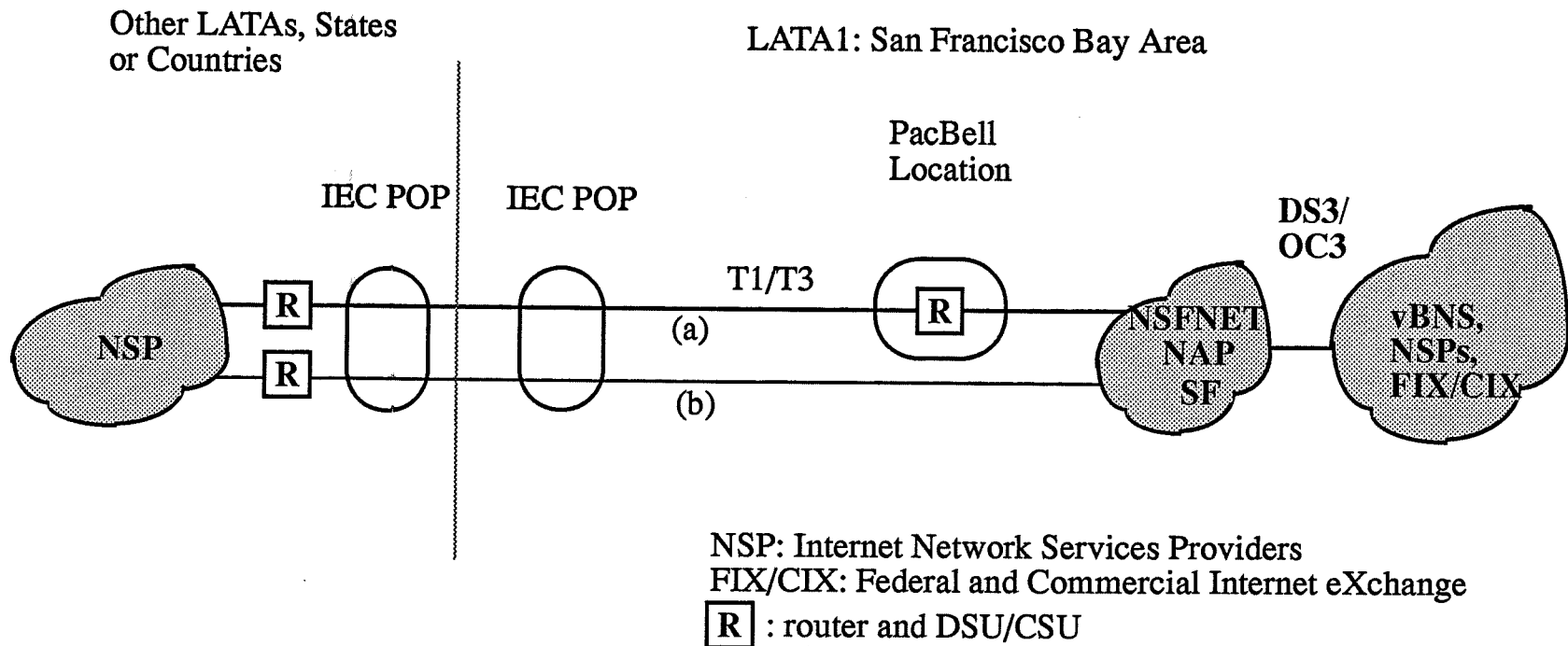


Figure 4. NSP Connection from other LATAs  
(a) with Service Collocation, (b) without collocation

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# California First

Pacific Bell's  
Communications Superhighway

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# What is the Communications Superhighway?

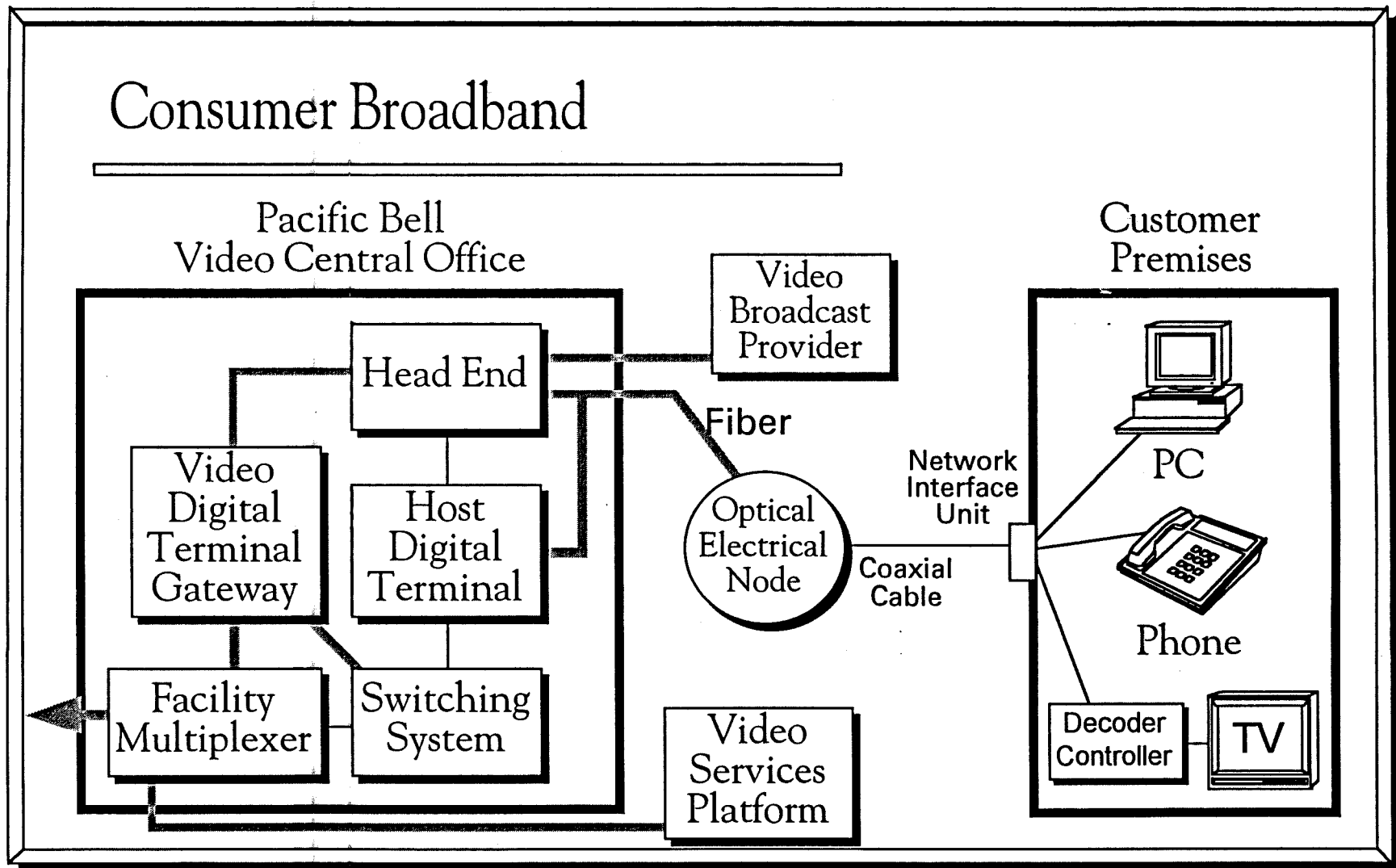
- A full-service broadband network for advanced information & entertainment services.
- A platform for a host of information providers.
- Alternative to existing cable television service.
- Interactive consumer services in education, entertainment, government and healthcare.

## Pacific Bell's Announcement

- \$16 Billion investment plan
- Advanced voice, data, and video services
- Platform for cable competition.
- More than 1.5 million homes by 1996
- An Additional 5 million by the year 2000.
- 7 year multi-billion dollar strategic relationship with AT&T

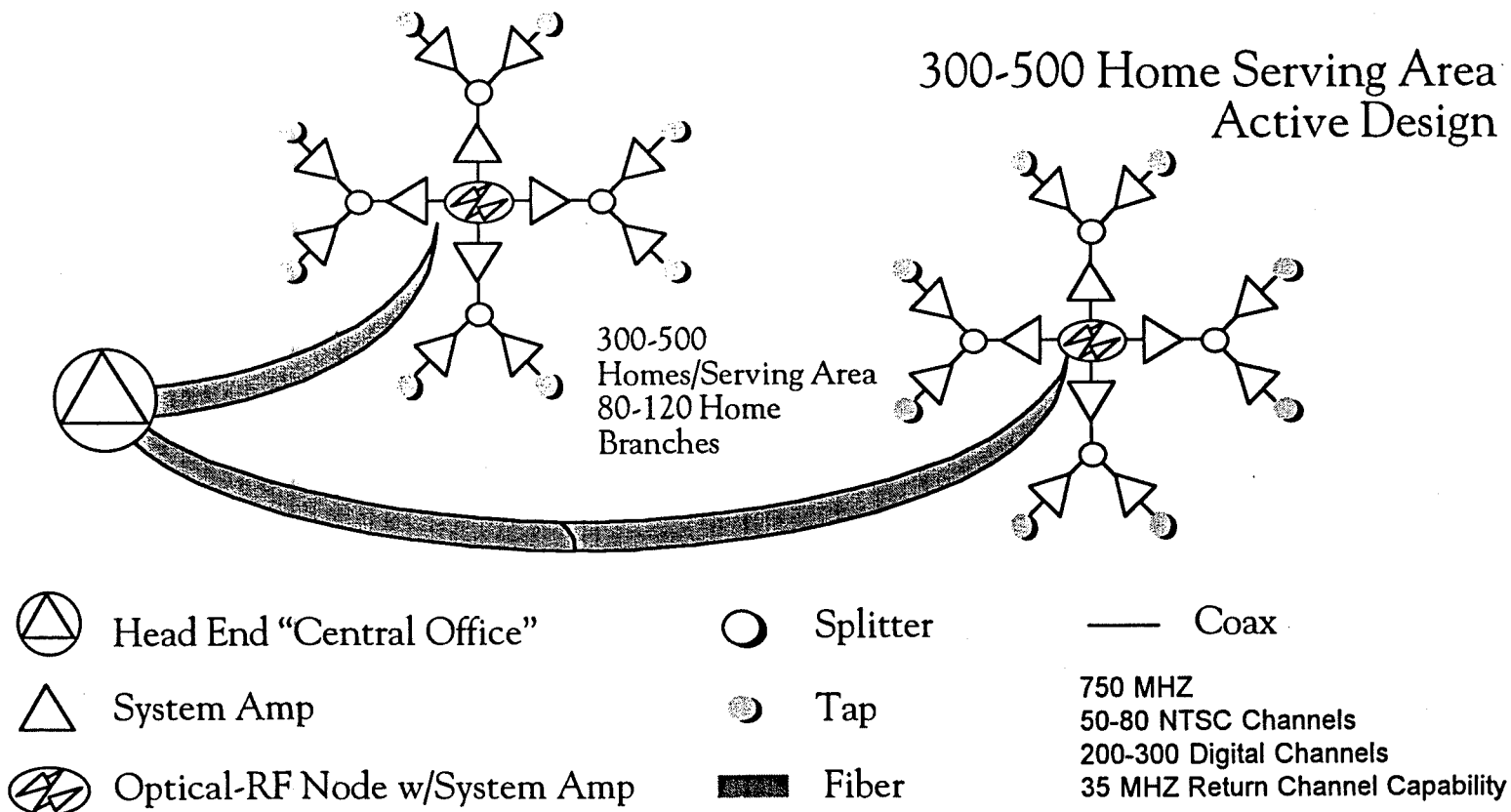
# Bringing the Communications Superhighway Home

## Consumer Broadband



# Bringing the Communications Superhighway Home

## Consumer Broadband Architecture - Serving Area Size



# Bringing the Communications Superhighway Home

## Deployment Plans

# of homes (in millions)

